

## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

11-190222

(43)Date of publication of application: 13.07.1999

(51)Int.CI.

F02B 67/06 F02N 11/08 F16H 7/12

(21)Application number: 09-359015

(71)Applicant:

**DENSO CORP** 

(22)Date of filing:

26.12.1997

(72)Inventor:

KATO AKIRA

**SOKI TAKAHIRO** 

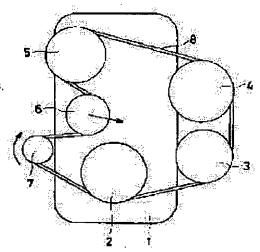
KAMIYA MASARU

## (54) BELT TRANSMISSION SYSTEM FOR INTERNAL COMBUSTION ENGINE

## (57) Abstract:

PROBLEM TO BE SOLVED: To provide a belt transmission system for internal combustion engines, capable of favorably performing engine startup and auxiliary driving by one belt by setting an auto-tensioner and a starter motor in optimal positions.

SOLUTION: With the belt transmission system for internal combustion engines, a crank pulley 2 installed in the crankshaft of an engine 1, pulleys 3, 4, 5 installed in auxiliaries A, B, C respectively, an idler pulley 6 installed in an auto-tensioner, and a pulley 7 installed in a starter motor, are provided. One belt 8 is sequentially laid over the crank pulley 2, the pulley 3, the pulley 4, the pulley 5, the idler pulley 6, and the pulley 7. When the engine starts, the turning force of the pulley 7 is transmitted to the crank pulley 2 through the belt 8 to start the engine 1. When the auxiliaries A, B, C are driven, the belt 8 is driven clockwise by the rotation of the crank pulley 2 to rotate the pulley 3, the pulley 4, the pulley 5, the idler pulley 6, and the pulley 7.



## **LEGAL STATUS**

[Date of request for examination]

01.02.2000

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

3129268

[Date of registration]

17.11.2000

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of

rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office